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===== Product Identification =====

Product ID:LEAD ACID BATTERY

MSDS Date:11/16/1985

FSC:6140

NIIN:00-184-3415

MSDS Number: BVTWF

=== Responsible Party ===

Company Name:DUAL-LITE INC

Address:SIMM LN

Box:468

City:NEWTON

State:CT

ZIP:06470-2307

Country:US

Info Phone Num:203-426-8011

Emergency Phone Num:203-426-8011

CAGE:25759

=== Contractor Identification ===

Company Name:DUAL-LITE INC

Address:SIMM LN

Box:46

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City:NEWTON

State:CT

ZIP:06470-2307

Country:US

Phone:203-426-8011

CAGE:25759

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===== Composition/Information on Ingredients =====

Ingred Name:LEAD (SARA III)

CAS:7439-92-1

RTECS #:OF7525000

Minimum % Wt:65.

Maximum % Wt:75.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:SEE 1910.1025

ACGIH TLV:0.15 MG/M3,DUST;9394

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID (SARA III)

CAS:7664-93-9

RTECS #:WS5600000

Minimum % Wt:17.

Maximum % Wt:30.

Other REC Limits:NONE RECOMM

ENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9394  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50 (ORAL RAT) IS 2140 MG/KG (H2SO4)  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: MAY CAUSE IRRITATION OF  
RESPIRATORY TRACT, EYES, SKIN OR GI TRACT. MAY CAUSE BURNS OF SKIN,  
EYES, OR GI TRACT. MAY CAUSE CORNEAL  
DAMAGE OR BLINDNESS. CHRONIC:  
TOOTH EROSION, INFLAMMATION OF NOSE, THROAT AND BRONCHIAL TUBES.  
Explanation of Carcinogenicity:THE ELECTROLYTE IS NOT LISTED BY IARC,  
NTP, OR OSHA AS A CARCINOGEN.  
Effects of Overexposure:INHALATION: BURNING SENSATION IN NOSE, THROAT  
AND LUNGS, COUGHING, WHEEZING, SHORTNESS OF BREATH. EYES: REDNESS,  
TEARING, BLURRED VISION, BURNS, SEVERE PAIN. SKIN: SEVERE PAIN,  
BURNS, REDNESS, RASH, ITCHING. INGESTION: BURNS OF MOUTH, THROAT,  
AND ESOPHAGUS, SEVERE STOMACH PAIN, NAUSEA, VOMITING.  
Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF AILMENTS  
OR WITH A PRE-EXISTING DISEASE INVOLVING THE RESPIRATORY TRACT OR  
TEETH MAY BE AT INCREASED RISK FROM EXPOSURE.

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===== First Aid Measures =====

First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING.  
GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER  
FOR 15 MINUTES HOLDING EYELIDS OPEN. GET PROMPT  
MEDICAL ATTENTION.  
SKIN :REMOVE CONTAMINATED CLOTHING. WASH WITHPLENTY OF WATER FOR 15  
MINUTES. GET MEDICAL ADVICE. INGESTION:DO NOT INDUCE VOMITING.  
GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL  
ATTENTION.

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===== Fire Fighting Measures =====

Extinguishing Media:USE DRY CHEMICAL, CARBON DIOXIDE, FOAM, HALOGEN.  
Fire Fighting Procedures:USE OF WATER IN EXTINGUISHING BURNING  
BATTERIES MAY CAUSE SPATTERING DUE TO THE PRESENCE OF

MOLTEN LEAD.

WEAR SCBA AND FULL PROTECTIVE GEAR.

Unusual Fire/Explosion Hazard:AFTER ELECTROLYTE IS ADDED AND BATTERY IS BEING CHARGED, HYDROGEN GAS IS PRODUCED. BATTERY MAY EXPLODE IF HYDROGEN GAS TRAPPED INSIDE THE CASE SHOULD IGNITE.

===== Accidental Release Measures =====

Spill Release Procedures:SHOULD A BATTERY BREAK OPEN, ISOLATE AREA. ELECTROLYTE SHOULD BE ABSORBED WITH A NON-ORGANIC TYPE ABSORBENT SUCH AS DRY SAND OR EARTH. AVOID DILUTION WITH WATER. LEAD SPILLED FROM THE BATTERY SHOULD BE VACUUMED, DO NOT SWEEP OR USE COMPRESSED AIR.

Neutralizing Agent:USE SODA ASH OR BAKING SODA TO NEUTRALIZE THE ELECTROLYTE.

===== Handling and Storage =====

Handling and Storage Precautions:AVOID THE USE OF UNINSULATED TOOLS. IF THEY ARE REQUIRED, TAKE CARE NOT TO ELECTRICALLY SHORT THE TERMINALS. REMOVE METAL JEWELRY BEFORE SERVICING.

Other Precautions:UNDER NORMAL CONDITIONS OF USE, EXPOSURE TO LEAD OR LEAD CONTAINING COMPOUNDS DOES NOT OCCUR. SHOULD A BATTERY BREAK OPEN AND A LEAD SPILL OCCUR, PRECAUTIONS SHOULD BE TAKEN TO PREVENT LEAD DUST FROM BECOMING AIR BORNE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:UNDER NORMAL CONDITIONS OF USE, RESPIRATORY PROTECTION IS NOT REQUIRED. HOWEVER, IF CONDITIONS ARISE THAT REQUIRE THEIR USE, USE ONLY NIOSH/MSHA RESPIRATORS APPROVED FOR DUST, FUME AND MIST.

Ventilation:BATTERY CHARGING AREAS MUST BE ADEQUATELY VENTILATED TO PREVENT HAZARDOUS CONCENTRATIONS OF FLAMMABLE GAS OR ACID MIST.

Protective Gloves:RUBBER GLOVES APPROVED FOR SULFURIC ACID

Eye Protection:CHEMICAL SPLASH GOGGLES AND FACE SHIELD

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE IMPERVIOUS WORK CLOTHING, BOOTS AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. LAUNDRY CONTAMINATION

INATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

THE BATTERY IS SHIPPED AND STORED DRY. AFTER ADDITION OF THE ELECTROLYTE , THE HCC WILL BE C1. MSDS WAS OF EXTREMELY POOR QUALITY-PARTS WERE UNREADABLE; MSDS RECEIVED FROM GSA. RQ FOR CERCLA AND SARA III IS 1000 LBS (ELECTROLYTE). MSDS WRITTEN FOR ELECTROLYE- IT IS THE PRIMARY HAZARD DURING NORMAL USE AND HANDLING.

===== Physical/Chemical Properties =====

HCC:Z7

Boiling Pt:=95.C, 203.F

B.P. Text:ELECTROLYTE

Vapor Pres:10

Vapor Density:>1

Spec Gravity:1.23-1.35

pH:1

Evaporation Rate & Reference: